-continued

documentation

When the show-me function is requested by the user, 5 the tutorial sends the product a DDE command containing an 'Action' structure. Upon receiving the DDE command, a DDE handler module on the product side performs the requested action. The module that handles the DDE processing for the product is contained in a 10 separate object file, which must be created and linked into the product. The DDE code does not impact any other part of the product code. However, DDE communication does require this modification to the prod-

Accordingly, an interactive, online tutorial system has been disclosed wherein improved information presentation, input monitoring and user assistance functions are provided. Although several preferred embodiments have been shown and described, it will be under- 20 stood that modifications and adaptations thereof will occur to persons skilled in the art. Therefore, the protection afforded the invention should not be limited except in accordance with the spirit of the following claims and their equivalents.

We claim:

1. An interactive online tutorial system for providing information in the use of a non-simulation software product operating [separately but]concurrently on a digital processing apparatus with said tutorial system, 30 said software product and said tutorial system operating running as separate executable application file processes, said software product generating a product display window with user interface controls therein, the digital processing apparatus including an instruction 35 processing unit, a data storage resource, an input system for receiving data input from a user, and an output system including a video display for providing data output to a user, said tutorial system comprising:

display control means for generating a tutorial dis- 40 play window in a first portion of said video display for displaying tutorial lesson information generated by said tutorial system;

software product control means for controlling said product display window to appear in a second 45 portion of said video display for displaying said user interface controls generated by said software product;

information presentation means for presenting tutorial lesson information in said tutorial display win- 50 dow, said tutorial lesson information including descriptions of user input lesson actions required for operation of said software product displayed in said product window, said tutorial lesson information being arranged in a hierarchy of lesson, step 55 and action levels;

tutorial assistance means for sending messages to said software product to manipulate said user interface controls and drive said software product to respond as if a user had performed said user input 60 lesson actions specified in said tutorial lesson information, said tutorial assistance means including a lesson control table containing action command statements corresponding to said messages;

first assistance request means for activating said user 65 mation. assistance means in response to a user request for assistance, said assistance request means including selection means for requesting assistance for a se-

lected one of said lesson, step and action levels of said tutorial lesson information;

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second assistance request means including a graphical display button for activating said user assistance means in response to said user request for assistance, said second assistance request means including means for displaying said graphical display button upon an erroneous input action being taken

2. An interactive online tutorial system product operable in conjunction with a digital processing apparatus in a first multi-tasking session for providing instruction in the use of a non-simulation software product operating in a separate but concurrently executing second multi-tasking session on said [a]digital processing apparatus in conjunction with said tutorial system product. said software product generating a product display window with user interface controls therein, said digital processing apparatus including an instruction processing unit, a data storage resource, an input system for receiving input from a user, an output system including a video display for providing data output to said user, and a multi-tasking operating system which concurrently operates one or more multi-tasking sessions and communicates user input actions from said input system via messages to said multi-tasking sessions installed and running under said operating system, said tutorial system comprising:

a data storage medium operable in conjunction with said digital processing apparatus;

display control means encoded on said medium for generating a tutorial display window in a first portion of said video display for displaying tutorial lesson information generated by said tutorial sys-

software product control means encoded on said medium for controlling said product display window to appear in a second portion of said video display for displaying said user interface controls generated by said software product;

information presentation means encoded on said medium for presenting said tutorial lesson information in said tutorial display window, said tutorial lesson information including descriptions of user input lesson actions required for operation of said software product displayed in said product window;

tutorial assistance means encoded on said medium for sending operating system messages to said software product to manipulate said user interface controls and drive said software product to respond as if a user had performed said user input lesson actions specified in said tutorial lesson information; and

assistance request means encoded on said medium for activating said user assistance means in response to a user request for assistance, said assistance request means including selection means for requesting assistance for a selected number of said user input lesson actions described in said tutorial lesson information.

3. The tutorial system of claim 2 wherein said tutorial assistance means includes a lesson control table containing command action statements corresponding to said user input actions set forth in said tutorial lesson infor-

4. The tutorial system of claim 3 wherein said tutorial assistance means includes message means for generating operating system messages from lesson actions de-